



Product Evaluation

EC74 | 1014

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-74

Effective Date: October 1, 2014

Re-evaluation Date: September 2018

Product Name: Nichiha NichiStraight™ and NichiStaggered™ fiber-reinforced cement shingle exterior siding

Manufacturer: Nichiha USA, Inc.
6465 E. Johns Crossing, Suite 250
Johns Creek, GA 30097
(770) 805-9466

General Description:

NichiStraight™ shingle siding is nominal 5/16" thick and comes in a 16" width. The siding comes in a 4' (48") length. The siding has a classic cedar finish with six singles in the following widths: two (2), 5-3/4", three (3), 7-3/4", and one (1), 11-3/4". A 1/4" keyway separates each shingle that starts 8-1/4" from the top edge and extends to the bottom edge.

NichiStaggered™ shingle siding is nominal 5/16" thick and comes in a 16" width. The siding comes in a 4' (48") length. The siding has a classic cedar finish with six singles in the following widths: two (2), 5-3/4", three (3), 7-3/4", and one (1) 11-3/4". The shingles have heights of 14-3/4", 15-1/2", and 16" that are staggered. A 1/4" keyway separates each shingle that starts 8-1/4" from the top edge and extends to the bottom edge.

Installation:

General Installation Requirements:

Use a weather resistive barrier in accordance with local building codes when installing the siding. Use the approved weather resistive barrier (WRB) as defined by the IRC or IBC.

Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.

Use stainless steel fasteners in high humidity and high moisture regions.

WOOD FRAMING APPLICATIONS

Assembly No. 1

NichiStraight™ and NichiStaggered™ 5/16" siding (Blind Nailing)

- **Fastener:** 2" long, 6d siding nail, Maze Model No. CLHD-115
- **Design pressure:** -35.0 psf

Installation: Use a minimum wall studs of Spruce-Pine-Fir (SPF) dimension lumber spaced a maximum of 16" on center. Apply a starter strip to the wall framing with Maze fasteners spaced 12" on center. Set a 9-1/4" wide lap siding over and flush with the starter strip. Secure to the wall studs with the Maze fasteners. Place the first course of shingle siding over the lap siding and secure to the wall studs with the Maze fasteners. Place the second course on top of the first course so that the top edge of the second course is 7" above the first course top edge. Secure the second course of shingle siding to the wall studs with the Maze fasteners. Install the remaining courses in a similar manner. Vertical shingle siding edges must occur over wall studs.

Assembly No. 2

NichiStraight™ and NichiStaggered™ 5/16" siding (Blind Nailing)

- **Fastener:** 2" long, 6d ring shank siding nail, Maze Model No. CLCEM115A
- **Design pressure:** -45.4 psf

Installation: Use a minimum wall studs of Spruce-Pine-Fir (SPF) dimension lumber spaced a maximum of 24" on center. Install a minimum 7/16" OSB over the wall studs with fasteners spaced a maximum of 6" along the perimeter and 12" on center in the field. Apply a starter strip to the wall framing with Maze fasteners spaced 12" on center. Set a 9-1/4" wide lap siding over and flush with the starter strip. Secure to the wall studs with the Maze fasteners. Place the first course of shingle siding over the lap siding and secure with the Maze fasteners spaced 12" on center. Every other fastener (24" on center) must penetrate into a wall stud. Place the second course on top of the first course so that the top edge of the second course is 7" above the first course top edge. Secure the second course of shingle siding with the Maze fasteners spaced 12" on center. Every other fastener (24" on center) must penetrate into a wall stud. Install the remaining courses in a similar manner. Vertical shingle siding edges must occur over wall studs.

Assembly No. 3

NichiStraight™ and NichiStaggered™ 5/16" siding (Blind Nailing)

- **Fastener:** 2" long, 6d siding nail, Maze Model No. CLHD-115
- **Design pressure:** -32.5 psf

Installation: Use a minimum wall studs of Spruce-Pine-Fir (SPF) dimension lumber spaced a maximum of 24" on center. Install a minimum 7/16" OSB over the wall studs with fasteners spaced a maximum of 6" along the perimeter and 12" on center in the field. Apply a starter strip to the wall framing with Maze fasteners spaced 12" on center. Set a 9-1/4" wide lap siding over and flush with the starter strip. Secure to the wall studs with the Maze fasteners. Place the first course of shingle siding over the lap siding and secure with the Maze fasteners spaced 12" on center. Every other fastener (24" on center) must penetrate into a wall stud. Place the second course on top of the first course so that the top edge of the second course is 7" above the first course top edge. Secure the second course of shingle siding with the Maze fasteners spaced 12" on center. Every other fastener (24" on center) must penetrate into a wall stud. Install the remaining courses in a similar manner. Vertical shingle siding edges must occur over wall studs.

METAL FRAMING APPLICATIONS**Assembly No. 4****NichiStraight™ and NichiStaggered™ 5/16" siding (Blind Nailing)**

- **Fastener:** No. 8-18 x 1-5/8" long, S-12, wafer head with self-countersinking ribs, ROCK-ON screws, manufactured by ITW Buildex.
- **Design pressure:** -33.1 psf

Installation: Use a minimum wall studs of ProStud 20 Drywall Stud, 1-1/4" flange x 6" deep x 22 mil steel spaced a maximum of 24" on center. Apply a starter strip to the wall framing with the ITW fasteners spaced 12" on center. Set a 9-1/4" wide lap siding over and flush with the starter strip. Secure to the wall studs with the ITW fasteners. Place the first course of shingle siding over the lap siding and secure to the wall studs with the ITW fasteners. Place the second course on top of the first course so that the top edge of the second course is 7" above the first course top edge. Secured the second course of shingle siding to the wall studs with the ITW fasteners. Install the remaining courses in a similar manner. Vertical shingle siding edges must occur over wall studs.

Note: The manufacturer's installation instructions must be available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, IBC, and the Texas Revisions.